

Lab 5 – Files and Directories

PHP File Processing / File Streams: <http://www.php.net/manual/en/refs.fileprocess.file.php>

Aims:

- To be able to use various file functions to create a Web page that allows saving and reading of visitor's information to a text file on the server.

Getting Started:

Create a new folder named **"lab5"** under the "C:\htdocs" folder on your computer. Save today's work in this folder.

Task 1: Understanding file functions

Step 1:

Create a file **"shoppingsave.php"** that will receive the input data from **"shoppingform.php"** from Step 2 via POST method, saves the item and quantity into a text file called **"shop.txt"** in the **"data"** directory, and then output all items in the text file. The item and quantity is to be delimited by comma and must include proper end of line escape characters when saved into the text file. Before running the PHP script, make sure that the **"data"** folder exists and is located within the **"lab5"** folder. Use `empty()` for input validation.

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="utf-8" />
  <title>TITLE</title>
</head>
<body>
  <h1>Web Programming - Lab 5</h1>
  <?php // read the comments for hints on how to answer each item
    if ( (1) ) { // check if both form data is not empty
      $item = $_POST[" (2) "]; // obtain the form item data
      $qty = $_POST[" (3) "]; // obtain the form quantity data
      $filename = "data/shop.txt"; // assumes php file is inside lab05
      $handle = fopen($filename, " (4) "); // open the file in append mode
      $data = (5) ; // concatenate item and qty delimited by comma
      // and then add the end of line character
      (6) ($handle, $data); // write string to text file
      (7) ; // close the text file
      echo "<p>Shopping List</p> "; // generate shopping list
      $handle = fopen($filename, " (8) "); // open the file in read mode
      while (! (9) ($handle)) { // loop while not end of file
        $data = (10) ($handle); // read a line from the text file
        echo "<p>", $data, "</p>"; // generate HTML output of the data
      }
      (11) ; // close the text file
    } else { // no input
      echo "<p>Please enter item and quantity in the input form.</p>";
    }
  }
  ?>
</body>
</html>
```

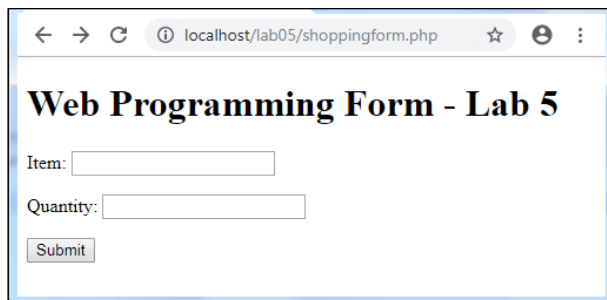
Hint: Any end of line escape characters must be enclosed using double quotes to be interpreted correctly.

Step 2:

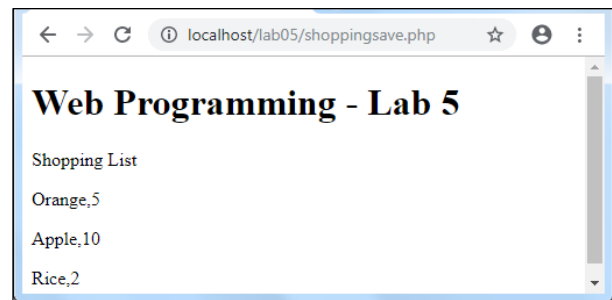
Create a file "**shoppingform.php**" that contains a form with a two text boxes that allows a user to enter the item name to be purchases and a number representing the quantity, and submit it to "**shoppingsave.php**".

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="utf-8" />
  <meta name="description" content="Web application development" />
  <meta name="keywords" content="PHP" />
  <meta name="author" content="Your Name" />
  <title>TITLE</title>
</head>
<body>
  <h1>Web Programming Form - Lab 5</h1>
  <form action = _____(12)_____ method = _____(13)_____>
    _____(14-15)_____
    _____
    _____
  </form>
</body>
</html>
```

The sample outputs of Task 1 are shown below. After test-running the script several times, we should see multiple shopping items being displayed in "**shoppingsave.php**".



A screenshot of a web browser showing the page 'localhost/lab05/shoppingform.php'. The page has a title 'Web Programming Form - Lab 5'. It contains two text input fields: 'Item:' and 'Quantity:'. Below these fields is a 'Submit' button.

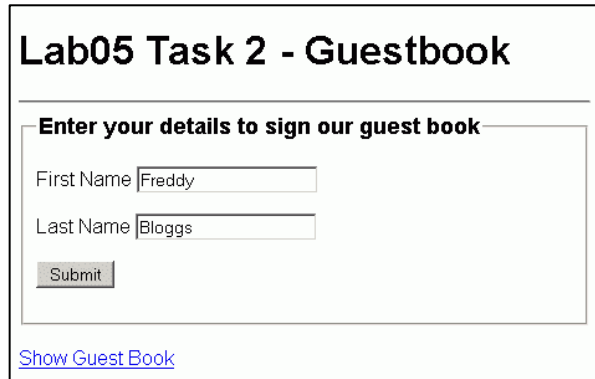


A screenshot of a web browser showing the page 'localhost/lab05/shoppingsave.php'. The page has a title 'Web Programming - Lab 5'. It displays a 'Shopping List' with the following items: 'Orange,5', 'Apple,10', and 'Rice,2'.

Task 2: Creating a Guest Book

Step 1:

Create a file **"guestbookform.php"** as shown below, that enables visitors to enter their names. Form action is to **"guestbooksave.php"** with method post. The "Show Guest Book" link is to **"guestbookshow.php"**.

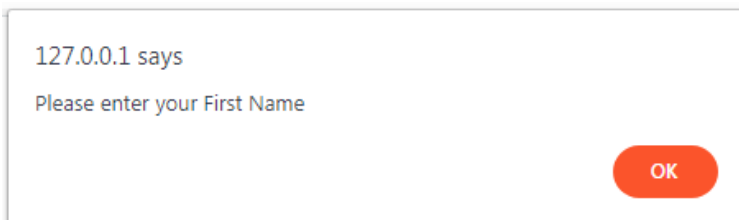


Step 2:

Create a file **"guestbooksave.php"** with a script that performs validation on the data entered, and then writes the guest's name to a **"guestbook.txt"** file in a folder named **"data"** located within the **"lab5"** folder. Have the PHP script automatically create the **"data"** folder if it does not exist.

For validation, check if both first and last names are provided, and if not, display an error message using Javascript alert message box. You are to enclose Javascript within the following tag:

```
<script type="text/javascript"> ...</script>
```



The "Ok" button should return the page to `guestbookform.php`

Open a handle to the file **"guestbook.txt"**, ready to append the new data. Before writing to the file, you need to first 'escape' the predefined characters (e.g., single quote, double quote, backslash, NULL) in the guests names with `addslashes()`.

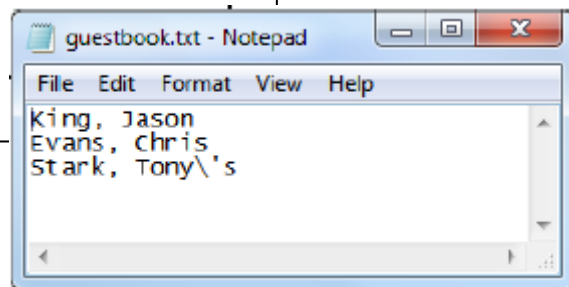
If the file is writable, write the guest name as a single line string to the file, with appropriate 'end of line' escape characters, using `fwrite`. Last name should come first followed by first name.

Check if the `fwrite` was successful or not, and `echo` the appropriate messages as shown below, such as "Thank you for signing the Guest book". Then close the handle to the file.

Lab05 Task 2 - Guestbook

Thank you for signing our guest book !

[Show Guest Book](#)



View the "**guestbook.txt**" file in Notepad to check the correctness of the written text content.

Step 3:

Create a file "**guestbookshow.php**" with a script to read the "**guestbook.txt**" file and display a webpage that shows all the visitors that have signed the Guest Book.

If the file is readable, then use the `file_get_contents()` function to read the entire data from the file into a string. Display the results within HTML `<pre>` `</pre>` elements, as this will recognise the line breaks in the data obtained from the file.

Hint: Use `stripslashes()` to 'unescape' any characters in the guests names before displaying them.

A sample output of the "**guestbookshow.php**" page is shown below:

